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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,238	12/20/2001	John P. Sherwin	1238.17519	9086

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EXAMINER

CHIN, PAUL T

ART UNIT

PAPER NUMBER

3652

DATE MAILED: 08/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/027,238

Applicant(s)

SHERWIN, JOHN P.

Examiner

PAUL T. CHIN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 8, 11-15 and 17-19 is/are rejected.
- 7) ☒ Claim(s) 6, 9, 10 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5. 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: it appears that on page 11, lines 4 and 6, the reference number "44" should be changed to -- 24 --, referring to "suction cups", on page 11, line 14, the figure number "9" should be changed to -- 4 --, ^{and} on page 12, line 13, [^]and the reference number "34" should be changed to -- 40 --, referring to "piercing point". Appropriate correction is required.

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

3. Claim 18 is objected to because of the following informalities: it appears that in claim 18, line 20, the word -- said -- should be inserted before "items" since the word "items" has been recited in line 3. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 8 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase "*a plurality of suction cups located on said arm*" (claim 11, lines 2-3) is not clearly understood. It is understood that the "*plurality of suction cups*" (24,24) have been mounted on the rails (22,22) (see Fig. 1) whereas "*a piercing point* (40)" has been

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mounted on the mount arm (38). Moreover, there is no antecedent basis for "*the frame*" (claim 8, line 2).

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-5, 7, 12-15, and 17-19, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Holter [5,727,832].

Re claims 1, 4, 13, and 14, Holter [5,727,832] discloses an end effector (5) for a robot (75), comprising a vacuum plenum having a mounting plate (10) mounted to the robot; the plate having a first surface and the second surface, the opposite of the first surface; a vacuum port (12) (see Fig. 2) located on the first surface of the plate passing through the plate wherein the vacuum port is being connected to a means for drawing vacuum or a vacuum source (not shown) (Col 3, lines 25-40); a surround (18, 18, 30, 30) located on the second surface of the plate, the surround enveloping the vacuum port (see Fig. 2) wherein the vacuum plenum includes the mounting plate, the port, and the vacuum source; a first gripping element (45) or blade mounted to the plate gripping element having which has a substantially smooth surface at the outside portion (see Fig. 2), and being *a stationary blade* rigidly mounted generally perpendicular to the plate (10); and a second gripping element (40) or blade *movably mounted* to the plate in spaced parallel relation opposite of the first gripping blade, the second gripping blade having a substantially smooth surface

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located at the outside surface (see Fig. 1), wherein the gripping blade being movably mounted generally perpendicular to the plate and wherein the first and second blade are located outboard the surround (see Fig. 2).

Re claim 18, in addition to the end effector (5) of claims 1 and 13, Holter [5,727,832] further discloses a system having the end effector (5), as presented in the above, a supply of items (90,90,90) (see Fig. 1), an industrial robot (75) with the end effector; the end effector having the plate (10) rotatably mounted to the robot (see Fig. 1) wherein the items (90,90,90) are gripped by the end effector.

Re claims 2 and 3, Holter's device [5,727,832] further shows that the second gripping element or blade (40) mounted to a moving means (68) or a linear actuator (Col 4, lines 58-64).

Re claim 5, Holter's device [5,727,832] further shows that the surround (18,18,30,30) is being positioned on the second surface of the plate in a substantially rectangular pattern and whereby the surround forms four perpendicularly arranged walls (see Figs. 2 and 3).

Re claims 7 and 17, Holter's device [5,727,832] further shows a vacuum sensor (17) (Figs. 2 and 4A) mounted on the plate.

Re claims 12,15, and 19, Holter's device [5,727,832] further shows a plurality of suction cups (85,85) located on an arm (84) (see Fig. 1) and the arm is indirectly mounted to the plate and in substantial perpendicular relationship the plate, and wherein the suction cups further having means for drawing vacuum (see Fig. 1).

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Allowable Subject Matter

8. Claims 6,9,10, and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Claims 8 and 11 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL T. CHIN whose telephone number is (703) 305-1524. The examiner can normally be reached on MON-THURS (7:30 -6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, EILEEN LILLIS can be reached on (703) 308-3248. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9326 for regular communications and (703) 872-9327 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-1113.

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PTC
August 7, 2003



EILEEN D. LILLIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600